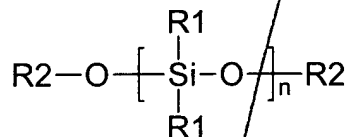


Please amend the claims as follows:

1. Ambient temperature curing coating composition comprising

- a polysiloxane having the formula



wherein each R1 is selected from the group consisting of alkyl, aryl, and alkoxy groups having up to six carbon atoms, reactive glycidoxy groups, and Si(OR3)₃ groups, wherein each R3 independently has the same meaning as R1, each R2 is selected from the group consisting of hydrogen and alkyl and aryl groups having up to six carbon atoms, and wherein n is selected so that the molecular weight of the polysiloxanes is in the range of from 500 to about 2,000,

- a glycidyl-functional acrylic polymer obtained by polymerisation in the presence of a reactive diluent,
- a hardener

6. The coating composition according to claim 5, wherein the mixture comprises 15 – 75% by weight of glycidyl methacrylate, 0 – 60% by weight of methylmethacrylate, and 10 – 85% by weight butyl acrylate.

RESPONSE

Applicants herein responded to the Office Action dated November 7, 2001 paragraph by paragraph:

1. Claims 9 and 10 have been deleted and new claims 11 and 12 have been added to address the concerns of the Examiner set forth in this paragraph.

2. Applicants thank the Examiner for her comments regarding Claim 6. Such claim has been amended to address the total weight percents. Support for the amendment can be found at page 6, lines 5-14, of the application.
3. Claim 10 has been deleted and new claim 12 added to address the Examiner's concerns in this paragraph.
4. No response necessary.
5. No response necessary.
- 6-9. The Examiner has rejected claims 1,2, 4,6,9 and 10 as allegedly unpatentable as anticipated under 35 U.S.C. 102(e) by Yamaki et al.; claims 2 and 5 as allegedly obvious under 35 U.S.C. 103(a) over Yamaki; and claims 1-4, 6, 9 and 10 as allegedly anticipated or alternatively obvious (35 U.S. C. 102(b) or 35 U.S.C. 103(a) in light of Yabuta et al. Applicants respectfully traverse these rejections.

Claim 1 has been amended so as to define the glycidyl-functional acrylic polymer as obtained by polymerisation in the presence of a reactive diluent.

Contrary to the Examiner's statement that all elements are disclosed in Yamaki or Yabuta, neither of these disclose a a glycidyl-functional acrylic polymer obtained by polymerisation in the presence of a reactive diluent, so the rejection is unsupported by the art and should be withdrawn. The exclusion of a claimed element, no matter how insubstantial or obvious, from a prior art reference is enough to negate anticipation. *Connell v. Sears, Roebuck & co.*, 220 USPQ 193, 198 (Fed. Cir. 1983). More importantly, if, as is the case here, there is **not a reasonable certainty** that the claimed subject matter will necessarily result, a rejection based on anticipation must fail. *In re Brink*, 164 USPQ 247, 249 (CCPA 1970).

Furthermore, Yamaki and Yabuta relate to high VOC compositions comprising an acrylic polymer and a silicone polymer whereas, as claimed the present invention has a glycidyl-functional acrylic polymer obtained by polymerisation in the presence of a reactive diluent. The current application, at page 5, lines 9-12, discloses that a coating composition with a low VOC can be prepared by preparing the glycidyl functional acrylic polymer in the presence of a reactive diluent. And is a low VOC composition as in claim 1.

Applicants point out that obviousness cannot be established merely by locating references, which describe various aspects of a Applicants' invention without also providing evidence of the **motivating** force which would impel one skilled in the art to do what the Applicants have done. Applicants submit that it is clear that the applied references, taken as a whole, fail to provide such motivating force, and that such force is only provided by Applicants' disclosure.

More particularly, contrary to the present invention, Yabuta does not mention or suggest that it is possible to prepare ambient curing coatings from mixtures of acrylic and silicone polymers.

Neither Yabuta nor Yamaki mention or suggest that an acrylic polymer which contains glycidyl functionality could be synthesised in the presence of a reactive diluent and there is no motivation to do so. } ✓

Experimental evidence shows that a coating composition obtained according to the present invention possesses specific properties with regard to a coating composition obtained by using a glycidyl-functional acrylic polymer prepared according to the conventional method.

For example, differences have been determined between a coating composition comprising a glycidyl functional acrylic polymer that was prepared by polymerising a butyl acrylate : glycidyl methacrylate copolymer (60:40 mole ratio) in

the presence of polysiloxane DC3074, and a comparative coating composition comprising a glycidyl functional acrylic polymer. The comparative coating composition was prepared by polymerising a butyl acrylate : glycidyl methacrylate copolymer (60:40 mole ratio) in trimethyl benzene followed by mixing the thus obtained acrylic polymer with polysiloxane DC3074.

The obtained coating compositions were applied to test panels and allowed to dry. After application, the coating layers were tested for their physical properties. The film hardness was determined using the Koenig hardness test, which involves a pendulum which swings onto the coating. The larger the number of swings before the pendulum stops the harder the coating is. The development of the film hardness of the coating composition according to the current invention was faster than the development of the hardness of the comparative coating composition as can be seen in Table 1.

When exposed to UV(A) test lamps, the gloss retention of the coating prepared according to the current invention was better than the gloss retention of the comparative coating, see Table 2.

Table 1 Development of film hardness after application

| Time after application | 0 hours | 1 week | 1 month | 4 months |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | Hardness (number of swings) | Hardness (number of swings) | Hardness (number of swings) | Hardness (number of swings) |
| Coating composition according to the current invention | 0 | 72 | 168 | 198 |
| Comparative coating composition | 0 | 94 | 104 | 108 |

Table 2 Gloss retention after exposure to UV(A) light

| Exposure time | 0 hours | 62 hours | 196 hours | 532 hours | 1087 hours |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | Non-scattered light (%) | Non-scattered light (%) | Non-scattered light (%) | Non-scattered light (%) | Non-scattered light (%) |
| Coating according to the current invention | 100 | 100 | 100 | 99 | 99 |
| Comparative coating | 100 | 62 | 56 | 49 | 46 |

Applicants provide the above data in support of their traverse of the present rejection of claims 1-2,4-6 and 9-10 in light of Yamaki or Yabuta. If the Examiner prefers, the Applicants will submit the above data in declaration form for entry in this application.

10. Claims 1-10 are rejected under 35 U.S.C. 103(a) as allegedly being obvious over Woo et al. Applicants respectfully traverse this rejection. Specifically, Woo relates to high temperature curable powder coatings comprising an acrylic polymer and a silicone polymer. Woo describes the preparation of a glycidyl functional acrylic resin in a solution of a silanol functional silicone resin, with the solvent being removed by vacuum distillation at the end of the polymerisation.

Woo does not teach or suggest the polysiloxane used in the present invention and there is no motivation to look to Woo for utilization of a polysiloxane as in the present invention. More specifically, Woo **teaches away** from using a reactive diluent for the preparation of a glycidyl functional acrylic resin. Woo teaches a method in which the silicone resin is dispersed into an organic solvent. The preferred silicone is Z-6018, a solid silanol functional silicone resin supplied by Dow Corning.

Moreover, Woo does not describe an ambient temperature coating composition. At column 6, lines 12-15, is pointed out that after application of a powder paint prepared with the composition of Woo, the powder paint can be heated to a temperature between 80 and 100°C in order to obtain flow out of the powder paint. Thus, Woo discloses a coating composition that requires elevated temperatures for both film formation and cure. The composition of the current invention on the other hand, can be cured at room temperature.

In view of the amendments and remarks herein, the papers on file previously, the present application is believed to be in condition for allowance, which action is respectfully requested.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Joan M. McGillicuddy". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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